Abstract Submitted for the DAMOP14 Meeting of The American Physical Society

Efimov physics in an ultracold Bose-Fermi gas of 40 K and 87 Rb atoms¹ MING-GUANG HU, RUTH BLOOM, TYLER CUMBY, GEORGE KO-TULA, JILA, CU-boulder and NIST, JONATHAN GOLDWIN, School of Physics and Astronomy, University of Birmingham, DEBORAH JIN, JILA, CU-boulder and NIST — We present measurements of Efimov physics in an ultracold Bose-Fermi gas of 40 K and 87 Rb atoms near an interspecies Feshbach resonance. In particular, we measure loss rates due to inelastic collisions in the trapped gas. We find a resonance in the inelastic collisions of Feshbach molecules with 87 Rb atoms, but no feature in the measured rates of inelastic collisions of three atoms.

¹This work is supported by the National Science Foundation under Grant No. 1125844 and by the National Institute of Standards and Technology

Ming-Guang Hu JILA, CU-boulder and NIST

Date submitted: 31 Jan 2014

Electronic form version 1.4